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Appendix A – Building Services ID Labeling

Chapter 5 – Technical Construction and
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Building Systems Name		Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes	
PLUMBING SYSTEMS (Equipment to be labeled in similar colors to system equipment is in.)						
Sanitary Piping	→→		SANITARY WASTE	→→	* LIGHT BLUE BANDS	
Storm Piping	→→		STORM DRAIN	→→		
Sanitary Waste Vent Piping	→→		SANITARY VENT	→→		
Campus Domestic Water Piping	→→		CAMPUS DOMESTIC WATER	→→		
Domestic Cold Water Piping	→→		DOMESTIC COLD WATER SUPPLY	→→		
Domestic Hot Water Piping	→→		DOMESTIC HOT WATER	→→		
Domestic Hot Water Recirculating Piping	→→		DOMESTIC HOT WATER RETURN	→→		
Tepid Water Piping (60 - 70 DEGREES)	→→		60 -70 degrees F Eyewash/Shower Safety Water a.k.a Tempered/Tepid Water	→→		
Tepid Water Piping (70 - 85 DEGREES)	→→		70 -85 degrees F Eyewash/Shower Safety Water a.k.a Tempered/Tepid Water	→→		
PCW Drain	→→		PROCESSED CHILLED WATER EMERGENCY PANEL DRAIN	→→		
Backflow Drain	→→		BACKFLOW PREVENTER DRAIN - PCW	→→	* GRAY BANDS	
Natural Gas Piping	→→		NATURAL GAS	→→		
	→→		2 lb NATURAL GAS	→→		
Natural Gas Vent Piping	→→		NATURAL GAS VENT	→→		
Natural Gas PRV Vent	→→		NATURAL GAS PRV VENT	→→		
Non-Potable Cold Water Piping	→→		NON-POTABLE COLD WATER	→→		
Non-Potable Hot Water Piping	→→		NON-POTABLE HOT WATER	→→		
Non-Potable Hot Water Return Piping	→→		NON-POTABLE HOT WATER RETURN	→→		
Reverse Osmosis Water Piping	→→		REVERSE OSMOSIS/DEIONIZED WATER	→→		
Low Pressure Nitrogen System Piping (set @ 35 PSI)	→→		LOW PRESSURE NITROGEN SET @ 35 PSI	→→		* Point of use labeling
Med. Pressure Nitrogen System Piping (35-80 PSI)	→→		MED. PRESSURE NITROGEN 35-80 PSI	→→		
High Pressure Nitrogen System Piping (81-200 PSI)	→→		HIGH PRESSURE NITROGEN 81 - 200 PSI	→→		
Nitrogen Vent	→→		NITROGEN RELIEF VENT	→→		
Specialty Gas	→→		SPECIALTY GASES	→→		
Emergency Shower	→→		EMERGENCY SHOWER	→→		
Carbon Dioxide	→→		CARBON DIOXIDE	→→		
Blowdown Valves	→→		LAB AIR BLOWDOWN VALVE	→→		
Laboratory Air System Piping	→→		COMPRESSED AIR	→→		
Laboratory Compressed Air Intake Piping	→→		COMPRESSED AIR INTAKE	→→		
Laboratory Vacuum System Piping	→→		VACUUM	→→	* BLACK/WHITE CHECKERBOARD BACKGROUND with	
Laboratory Vacuum Exhaust Piping	→→		VACUUM EXHAUST	→→		
Solar Pre-heat Water Piping	→→		SOLAR PRE-HEAT WATER	→→		
FIRE PROTECTION SYSTEMS						
Campus Sprinkler Piping	→→		CAMPUS SPRINKLER	→→	* BROWN BANDS	
Wet Sprinkler Piping	→→		SPRINKLER	→→		
Sprinkler Standpipe Piping	→→		SPRINKLER	→→		
Sprinkler Drain Piping	→→		SPRINKLER DRAIN	→→		
Fire Department Connection Piping	→→		FIRE DEPARTMENT CONNECTION	→→		
Fire Dry Standpipe	→→		FIRE DRY STANDPIPE	→→		
Duct Smoke Test Switch	→→		DUCT SMOKE TEST SWITCH	→→		
Fire Command Center	→→		FIRE COMMAND CENTER	→→		
AIR SYSTEMS						
Outside Air Ductwork	→→		OUTSIDE AIR	→→		
Supply Ductwork	→→		SUPPLY AIR	→→		
Return Air	→→		RETURN AIR	→→		
Supply Valve	→→		Supply Valve-X	→→		
Boiler Air	→→		BOILER INTAKE AIR	→→		
Fan Coil Units	→→		FCU-X	→→		
Air Handling Units			AHU-X-X			
Humidifiers			H-X-X			
Low Pressure Steam Piping < 80 PSI	→→		STEAM	→→		
Steam Condensate	→→		STEAM CONDENSATE	→→		
Fume Hood Exhaust Ductwork	→→		HOOD EXHAUST	→→		
Snorkel Exhaust	→→		SNORKEL EXHAUST	→→		
Dedicated Q Fogger Exhaust	→→		DEDICATED Q FOGGER EXHAUST	→→		

Building Systems Name	Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
Fume Hood Exhaust Air Valves	→→	HOOD VALVE-X	→→	* P touch label Uses FAMIS EQ# * No BANDs and P touch label
Fume Hood Actuator & Control Numbering		HOOD EQUIPMENT - XXXXXXXX		
Fume Hoods		WASTE & PREP HOOD		
Energy Recovery Units		ERU-X-X		
Fume Hood Exhaust Fans	→→	HOOD EXHAUST FAN-X	→→	
General Exhaust Ductwork	→→	EXHAUST	→→	
General Exhaust Valve		EV-X		
Exhaust Fans		EF-X		
Generator Exhaust	→→	GENERATOR EXHAUST	→→	
Boiler Exhaust	→→	BOILER EXHAUST	→→	

MECHANICAL PIPING SYSTEMS

Boiler Water	→→	BOILER WATER	→→	
Campus Chilled Water Supply Piping	→→	CAMPUS CHILLED WATER SUPPLY	→→	
Campus Chilled Water Return Piping	→→	CAMPUS CHILLED WATER RETURN	→→	
Future Campus Chilled Water Supply Connection	→→	FUTURE CHILLED WATER SUPPLY	→→	
Future Campus Chilled Water Return Connection	→→	FUTURE CHILLED WATER RETURN	→→	
Chilled Water Pumps		CHILLED WATER PUMP		
Chilled Water Supply Piping	→→	BUILDING CHILLED WATER SUPPLY	→→	
Chilled Water Return Piping	→→	BUILDING CHILLED WATER RETURN	→→	
Condensate Drain	→→	CONDENSATE DRAIN	→→	
Plate & Frame Heat Exchangers		PLATE HEAT EX-X		
Sump Pump Drain	→→	SUMP PUMP DRAIN	→→	+
Campus Medium Hot Water Supply Piping	→→	CAMPUS HEATING WATER SUPPLY	→→	
Campus Medium Water Return Piping	→→	CAMPUS HEATING WATER RETURN	→→	
Hot Water Supply Piping	→→	BUILDING HEATING WATER SUPPLY	→→	
Hot Water Return Piping	→→	BUILDING HEATING WATER RETURN	→→	
Heating Water Pumps		HEATING WATER PUMP		
Boiler		BOILER - X		
Hot Water Pumps		HOT WATER PUMP -X		
Campus Steam Supply	→→	CAMPUS STEAM SUPPLY	→→	
Campus Steam Return	→→	CAMPUS STEAM RETURN	→→	
Campus Steam Condensate	→→	CAMPUS STEAM CONDENSATE	→→	* *
Steam Supply Piping	→→	BUILDING STEAM SUPPLY	→→	
Steam Return Piping	→→	BUILDING STEAM RETURN	→→	
Steam Condensate Piping	→→	BUILDING STEAM CONDENSATE	→→	
Glycol Solution Supply Piping	→→	GLYCOL SUPPLY	→→	
Glycol Solution Return Piping	→→	GLYCOL RETURN	→→	
Glycol Solution Pumps		GLYCOL PUMP-X		
Process Chilled Water Supply Piping	→→	PROCESS CHILLED WATER SUPPLY	→→	
Process Chilled Water Return Piping	→→	PROCESS CHILLED WATER RETURN	→→	
Hot Water Heater		DOMESTIC HOT WATER HEATER		
Process Chiller		PCH-1		
Air Cooled Condenser		ACC-1		
Split System Air Conditioning Unit		SPLIT SYSTEM AC-X		
Refrigerant Piping	→→	REFRIGERANT LIQUID TYPE	→→	
pipe serves FCU by room ID		FCU - XXXX		
pipe serves Safety Valve by room ID		SV - XXXX		
pipe serves Expansion Valve by room ID		EV - XXXX		
pipe serves AHU ID per Unit (wing - Unit #)		AHU X - X		

ELECTRICAL SYSTEMS

Electrical Conduits		ELECTRICAL PANEL X TO X	
Generator Conduits		GENERATOR TO PANEL X	
Duct Smokes Access Panel		DUCT SMAOKES ACCESS PANEL	
Electrical Feeder Markings			
120V/208			
Phase A		Black Tape	
Phase B		Red Tape	
Phase C		Blue Tape	
Neutral		White Tape	
Ground		Green Tape or Bare Wire	
120V/240			
Phase A		Black Tape	

Building Systems Name		Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
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Phase B			Red Tape		
Phase C			N/A		
Nuetral			White Tape		
Ground			Green Tape or Bare Wire		
480V / 277V LIFE SAFETY			480V/277V LIFE SAFETY		
480V / 277V					
Phase A			Brown Tape		
Phase B			Orange Tape		
Phase C			Yellow Tape		
Nuetral			Gray Tape		
Ground			Green Tape or Bare Wire		
Medium Voltage 4160 or 34500					
Phase A			Red Tape		
Phase B			Blue Tape		
Phase C			Black Tape		
Neutral			White		
Ground			Green Tape or Bare Wire		
Note: These circuits are treated as they would be by a utility on campus. The nuetral conductor is grounded at all transformers, sector cabinets and utility structures.					
Electrical caution signs			"CAUTION" ELECTRICAL JUNCTION BOX 120/240V, SINGLE PHASE, 3 WIRE CONTAINS BRANCH CIRCUITS FED FROM PANEL L5 LOCATED IN ROOM NB09		
Building Grounding System			BLACK TEXT ON GREEN TAPE		

FIRE ALARM SYSTEMS

Fire Alarm Conduit		Silver Conduit with Red Couplings		
Fire Alarm Wiring				
Initiating Circuits		Red Wire		
2nd Initiating Circuit (If required)		Red Wire W/ Orange Stripe		
Horn/Strobe Circuits		Red Wire W/ White Stripe		
Speaker Circuit		Red Wire W/ Blue Stripe		
Power Circuit (24V)		Red Wire W/ Black Stripe		
Communication Line		Red Jacket W/ Yellow Stripe		
Audio Interconnect		Red Jacket W/ Green Stripe		
Booster Interconnect		Red Jacket W/ Purple Stripe		
Fire Alarm Fiber Optic Cabling		"FIRE ALARM - DO NOT REMOVE"		* Label @ Terminations and Junction Boxes
Fire Alarm Panels		"FIRE ALARM CONTROL"		* Label @ Panels and post color code schedule @ ea
Smoke Power, Door Holders, Etc.		Yellow Wire		

CONTROLS SYSTEMS

BAS Controls Panels		BAS PANEL X		
Lab Room Controller - Controls Panels		LAB ROOM CONTROLS PANEL X		
Lab Room Controller by room ID		LAB ROOM CONTROLLER XXXX		
Controls Conduits		BUILDING AUTOMATION		
Controls Wiring		BUILDING AUTOMATION		
BAS Remote Seneors		BAS REMOTE SENSORS		
BAS Boiler/CHW Controls		BAS BOILER/CHW CONTROLS		
BAS / Boiler Controls		BAS BOILER CONTROLS		
BAS/CHW Controls		BAS / CHW CONTROLS		
BAS Communications		BAS COMMUNICATIONS		
Fuse ID		USE 500 MA FUSE		
Power to fume hood controls		POWER TO FUME HOOD CONTROLS		
BAS - Exhaust DP Sensor		BAS - EXHAUST DP SENSOR		
BAS - Supply DP Sensor		BAS - SUPPLY DP SENSOR		
BAS / LAB CONTROLS		BAS / LAB CONTROL		
ERU'S		ERU XX / BAS		
AHU'S		AHU XX/BAS		-

AUXILLARY ELECTRICAL SYSTEMS

Security Conduit		SECURITY		
Security Wiring		SECURITY		
Telecommunications Conduit		TELECOMMUNICATIONS		
Telecommunications Wiring		TELECOMMUNICATIONS		
Audio/Visual Conduit		AUDIO/VISUAL		
Audio/Visual Wiring		AUDIO/VISUAL		
Property of Telecom		PROPERTY OF TELECOM		
Property fo Fairpoint		PROPERTY OF FAIRPOINT		

SOLAR SYSTEM

Glycol Supply	→→	SOLAR HOT WATER HEATER GLYCOL SUPPLY	→→
Glycol Return	→→	SOLAR HOT WATER HEATER GLYCOL RETURN	→→
Solar heater Exhaust	→→	SOLAR HOT WATER HEATER EXHAUST	→→

Building Systems Name		Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
Solar Heater Intake		→→	SOLAR HOT WATER HEATER AIR INTAKE	→→	